Amendments To The Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A rolling-contact bearing containing a solid lubricant therein comprising;

an inside rotating member having a guideway area made thereon with a first raceway, an outside rotating member rotary relative to the inside rotating member and having a second raceway opposed to the first raceway; and

a preassembled cage ~~with~~ including cylindrical rollers spaced at a preselected interval around the cage to roll through a circular cylindrical race defined between the first raceway on the inside rotating member and the second raceway on the outside rotating member;

wherein the preassembled cage ~~with the rollers are engaged together as~~ is embedded in a solid lubricant together with the cylindrical rollers to form a ~~separate~~ preassembled unitary molding in ~~a mold by a solid lubricant which lubricates the rollers running~~ which the rollers are lubricated when the preassembled unitary molding is engaged to run through the race;

wherein rolling-surfaces of the rollers of the unitary molding are partially exposed out of an inside

circular surface of the unitary molding; **[[and]]**

~~wherein the unitary molding is engaged in or disengaged out of the race of the bearing after the race is assembled by respectively sliding the unitary molding in or out of the assembled race;~~

wherein the inside rotating member is a stud having a flange integral with one of axially opposite ends of the guideway area and a rod integrally extending from another of the axially opposite ends of the guideway area and having a diameter smaller than that of the guideway area and a circular plate fitting over the rod of the stud,

wherein the outside rotating member is an outer ring recessed at axially opposite ends thereof to form setbacks, thereby providing an intermediate area midway between the setbacks forming the second raceway, **[[and]]**

wherein the flange on the stud fits in any one of the setbacks while the circular plate fits in another of the setbacks, and

wherein the stud has an oil port open at a free end thereof and communicating with an oil passage, which extends to a radially outside circular surface around the guideway area, and also communicating with another oil passage, which extends to an outside circular surface around the rod, whereby

the oil passage extending to the guideway area of the stud is protected against being blocked with the solid lubricant of the unitary molding.

Claims 2-3. (Cancelled)

4. (Currently Amended) The rolling-contact bearing containing the solid lubricant therein, constructed as defined in claim 1, wherein thrust rings made of wear-resistant plastics ~~such as~~ of polyetheretherketone and respectively fit in the setbacks recessed in the outer ring on and against to the flange and the circular plate, and wherein the thrust rings are ~~located~~ placed along an outer circumference of axially opposite ends of the unitary molding.

5. (Previously Presented) The rolling-contact bearing containing the solid lubricant therein, constructed as defined in claim 1, wherein seal members of synthetic resin or synthetic rubber are respectively placed in abutment against outer circumferences of the flange and the circular plate.

Claim 6. (Cancelled)

7. (Previously Presented) The rolling-contact bearing containing the solid lubricant therein, constructed as defined in claim 1, wherein the outer ring has an outside surface of spherical configuration.

Claim 8. (Cancelled)

9. (Currently Amended) A rolling-contact bearing containing a solid lubricant therein comprising;

an inside rotating member having a guideway area made thereon with a first raceway, an outside rotating member rotary relative to the inside rotating member and having a second raceway opposed to the first raceway; and

a preassembled cage with cylindrical rollers spaced at a preselected interval around the cage to roll through a circular cylindrical race defined between the first raceway on the inside rotating member and the second raceway on the outside rotating member;

wherein the preassembled cage with the cylindrical rollers are engaged together as a ~~separate~~ preassembled unitary molding in a mold by a solid lubricant which lubricates the rollers running through the race;

wherein rolling-surfaces of the rollers of the preassembled unitary molding are partially exposed out of an inside circular surface of the unitary molding; [[and]]

~~wherein the unitary molding is engaged in or disengaged out of the race of the bearing after the race is assembled by respectively sliding the unitary molding in or out of the assembled race;~~

wherein the outside rotating member is an outer ring

having flanges at axially opposite ends thereof and a circular area lying midway between the flanges, the cage with the rollers being embraced inside the circular area of the outer ring the cage;

wherein the outer ring, the preassembled cage with the cylindrical rollers are all formed together with solid lubricant by use of the mold into a complete unitary molding;

wherein the ~~complete~~ preassembled unitary molding including the outer ring therein fits over the inside rotating member; and

wherein the outer ring has an oil groove made circumferentially of a circular outside surface thereof, and an oil hole extended from the circular outside surface to a circular inside surface of the outer ring.

10. (Currently Amended) [[The]] A rolling-contact bearing containing [[the]] a solid lubricant therein, comprising: ~~constructed as defined in claim 1,~~

an inside rotating member having a guideway area made thereon with a first raceway, an outside rotating member rotary relative to the inside rotating member and having a second raceway opposed to the first raceway, and a preassembled cage including cylindrical rollers spaced at a preselected interval around the cage to roll through a circular cylindrical race defined between the first raceway on

the inside rotating member and the second raceway on the outside rotating member;

wherein the preassembled cage is embedded in a solid lubricant together with the cylindrical rollers to form a preassembled unitary molding in which the rollers are lubricated when running through the race;

wherein rolling-surfaces of the rollers of the unitary molding are partially exposed out of an inside circular surface of the unitary molding;

wherein the inside rotating member is a stud having a flange integral with one of axially opposite ends of the guideway area and a rod integrally extending from another of the axially opposite ends of the guideway area and having a diameter smaller than that of the guideway area and a circular plate fitting over the rod of the stud,

wherein the outside rotating member is an outer ring recessed at axially opposite ends thereof to form setbacks, thereby providing an intermediate area midway between the setbacks forming the second raceway,

wherein the flange on the stud fits in any one of the setbacks while the circular plate fits in another setback, and

wherein [[the]] a mold for forming the unitary molding is comprised of an outside mold having an inside

circular surface, an inside mold disposed inside the outside mold and made up of a radially thicker area and a radially reduced area less than the thicker area, and an intermediate mold disposed to fit closely over an outside circular surface around the reduced area of the inside mold, defining a circular clearance over the inside circular surface of the outside mold, the intermediate mold being made of a substance that is larger in thermal expansion than other substance for the outside and inside molds[[,]]. ~~and wherein the cage with the rollers spaced at a preselected interval around the cage is placed together with the solid lubricant and formed into a complete unitary molding with the help of a difference in thermal expansion between the intermediate mold and the outside mold.~~

11. (Currently Amended) The rolling-contact bearing containing the solid lubricant therein, constructed as defined in claim 10,

wherein the unitary molding is comprised of the preassembled cage with the cylindrical rollers spaced at regular intervals is first placed into the clearance between the intermediate mold and the outside mold and the solid lubricant is poured into the clearance and around the cage and the rollers to fill the clearance as long as to reach everywhere including gaps left between the cage and every

roller, then the mold is heated to get the intermediate mold to expand by heat greater than the outside mold, whereby the solid lubricant is pressed against the rollers around the cage with pressure developed by the difference in thermal expansion between the intermediate mold and the outside mold, followed by solidifying at ambient temperature into the complete unitary molding.

12. (Previously Presented) The rolling-contact bearing containing the solid lubricant therein, constructed as defined in claim 11, wherein the solid lubricant in solution state is poured into the clearance and around the cage and the rollers to fill the clearance as long as to reach everywhere including gaps left between the cage and every roller, followed by solidifying at ambient temperature.

Claim 13. (Canceled)

14. (Currently Amended) A rolling-contact bearing containing solid lubricant therein comprising;

an inside rotating member having a guideway area made thereon with a first raceway, an outside rotating member rotary relative to the inside rotating member and having a second raceway opposed to the first raceway; and a cage with rollers spaced at a preselected interval around the cage to roll through a race defined between the first raceway on the

inside rotating member and the second raceway on the outside rotating member;

wherein the outside rotating member is an outer ring having flanges at axially opposite ends thereof and a circular area lying midway between the flanges, the cage with the rollers being engaged against the circular area of the outer ring;

wherein the outer ring[[,]] and the cage with the rollers are all ~~engaged~~ formed together as a ~~separate~~ unitary molding in a mold by a solid lubricant; [[and]]

wherein the unitary molding including the outer ring therein is slid over the inside rotating member to form the assembled bearing; and

wherein the outer ring has an oil groove made circumferentially of a circular outside surface thereof, and an oil hole extended from the circular outside surface to a circular inside surface of the outer ring.

Claim 15. (Cancelled)

16. (Previously Presented) The rolling-contact bearing containing the solid lubricant therein, constructed as defined in claim 14, wherein the mold is comprised of an outside mold having an inside circular surface, an inside mold disposed inside the outside mold and made up of a radially

thicker area and a radially reduced area less than the thicker area, and an intermediate mold disposed to fit closely over an outside circular surface around the reduced area of the inside mold, defining a circular clearance over the inside circular surface of the outside mold, the intermediate mold being made of a substance that is larger in thermal expansion than other substance for the outside and inside molds.

17. (Previously Presented) The rolling-contact bearing containing the solid lubricant therein, constructed as defined in claim 16, wherein the outside rotating member of the outer ring having flanges at axially opposing ends thereof is placed in the clearance between the intermediate mold and the outside mold, and the cage with the rollers spaced at regular intervals is surrounded with the inside circular surface of the inside of the outer ring.

18. (Previously Presented) The rolling-contact bearing containing the solid lubricant therein, constructed as defined in claim 17, wherein the solid lubricant is poured in the clearance and around the outer ring, cage and the rollers to fill the clearance as long as to reach everywhere including gaps left between the cage and every roller, then the mold is heated to get the intermediate mold to expand by heat greater than the outside mold, whereby the solid lubricant is pressed

against the rollers around the cage with pressure developed by the difference in thermal expansion between the intermediate mold and the outside mold, followed by solidifying at ambient temperature into the unitary molding.